

Petition of Insite Towers LLC and TowerCo  
Assets LLC and TowerCo II LLC for Waiver of  
47 C.F.R. § 17.47(b)

and to Global Signal, Inc. (“GSI”) waivers of Section 17.47(b) of the Rules to allow annual, rather than quarterly, inspection of towers monitored by specified, technologically advanced monitoring systems.<sup>4</sup> On October 15, 2007, the Wireless Telecommunications Bureau (“Bureau”) granted to Optasite Towers L.L.C. (“Optasite”) a similar waiver of Section 17.47(b) for its towers that are monitored using the same technology (the Eagle Monitoring System) as ATC.<sup>5</sup> Subsequently, similar relief was granted to Crown Castle USA Inc. (“Crown Castle”) and Global Tower LLC (“Global Tower”) based on their use of technologies that compare favorably with the Eagle Monitoring System.<sup>6</sup> Following Crown Castle and Global Tower, Diamond Communications LLC and Diamond Towers LLC (“Diamond”) were granted a waiver based on their use of the TowerSentry Monitoring Systems.<sup>7</sup> While Diamond’s joint petitioner TowerSentry LLC (“TowerSentry”) was not specifically granted a waiver, relief was extended to TowerSentry’s customers through an expedited waiver process.<sup>8</sup> Most recently, Mobilitie, LLC (“Mobilitie”) was also granted a waiver for its towers that are monitored using the aforementioned Eagle Monitoring System.<sup>9</sup>

4. Insite and TowerCo filed their instant waiver request on March 17, 2010. Insite and TowerCo seek the same relief granted to ATC, GSI, Optasite, Crown Castle, Global Tower, Diamond, and Mobilitie. Both Insite and TowerCo assert in their petition that the RMS System is “similar to and provides the same functionalities as” a system that has previously supported a waiver grant, the TowerSentry Monitoring System.<sup>10</sup> We will consider both the Insite and TowerCo waiver requests jointly in this Order.

### III. DISCUSSION

5. Section 1.925 of the Commission’s Rules provides that, with respect to wireless telecommunications services, the Commission may grant a request for waiver if it is shown that: “(i) The underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) In view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.”<sup>11</sup> As discussed below, we grant waivers to both Insite and TowerCo because we find that application of the quarterly inspection requirements of Section 17.47(b) to the towers in question is not necessary to serve

<sup>4</sup> In the Matter of Requests of American Tower Corporation and Global Signal, Inc., to Waive Section 17.47(b) of the Commission’s Rules, WT Docket No. 05-326, *Memorandum Opinion and Order*, 22 FCC Rcd 9743 (2007) (*ATC/GSI Waiver Order*).

<sup>5</sup> Petition of Optasite Towers L.L.C. for Waiver of Section 17.47(b) of the Commission’s Rules, *Memorandum Opinion and Order*, 22 FCC Rcd 18456 (WTB 2007) (*Optasite Waiver Order*).

<sup>6</sup> In the Matter of Crown Castle USA Inc. Request for Waiver of 47 C.F.R. § 17.47(b), *Memorandum Opinion and Order*, 22 FCC Rcd 21881 (WTB 2007) (*Crown Castle Waiver Order*); In the Matter of Request of Global Tower LLC for Waiver of 47 C.F.R. § 17.47(b), *Memorandum Opinion and Order*, 23 FCC Rcd 16531 (WTB 2008) (*Global Tower Waiver Order*).

<sup>7</sup> In the matter of TowerSentry LLC Request for Waiver of 47 C.F.R. § 17.47(b) and Joint Petition of Diamond Communications LLC and Diamond Towers LLC for Waiver of 47 C.F.R. § 17.47(b), *Memorandum Opinion and Order*, 24 FCC Rcd 10274 (WTB 2009) (*TowerSentry/Diamond Waiver Order*).

<sup>8</sup> *Id.* at 6.

<sup>9</sup> In the matter of Request of Mobilitie, LLC for Waiver of 47 C.F.R. § 17.47(b) and Flash Technology Request for Waiver of 47 C.F.R. § 17.47, *Memorandum Opinion and Order*, 24 FCC Rcd 11949 (WTB 2009) (*Mobilitie/Flash Waiver Order*).

<sup>10</sup> *Insite and TowerCo Waiver Request* at 11.

<sup>11</sup> 47 C.F.R. § 1.925(b)(3).

the underlying purposes of the rule, and grant of the waivers is in the public interest. Based on the evidence presented, strict application of the rule to Insite or TowerCo would be unduly burdensome and contrary to the public interest.

6. Insite and TowerCo assert that the RMS System “provides state-of-the-art monitoring and notification of the status of [monitored] towers and their lighting systems.”<sup>12</sup> Insite and TowerCo assert that their system employs sophisticated, self-diagnostic functions that are sufficiently robust so as to make unnecessary quarterly inspections to ensure that the control devices, indicators, and alarm systems on the towers are operating properly. Specifically, Insite and TowerCo maintain that the RMS System provides the functional equivalent of a continuous inspection of control devices on all towers it monitors, and as a result, users of the RMS System are alerted to actual and potential problems immediately or at most within 24 hours.<sup>13</sup> In support of these contentions, Insite and TowerCo describe the following features of the RMS System:

(1) *Alarm notification.* At each RMS-monitored tower, an on-site, remote wireless communications system, comprised of a device connected to the tower lighting system and a computer board, continuously monitors the status of the tower lights.<sup>14</sup> All alarm signals from the tower units are reported independently to each of two RMS Network Operations Centers (“NOCs”).<sup>15</sup> The RMS System classifies alarms on a 1 to 9 priority scale, with power, strobe, and beacon failures given the highest level of priority, while side marker failures are given a lower priority designation.<sup>16</sup> Beacon/strobe failure, beacon/strobe communication failure, photo cell failure, site communication failure, filter failure, low flash energy, and consecutive missed flashes are all treated as major alarms.<sup>17</sup> When a tower lighting malfunction is detected, the RMS System alerts the NOCs, thereby automatically triggering an alarm notification on all technicians’ computer consoles. The NOC technicians then perform detailed diagnostic tests on the tower’s lighting system.<sup>18</sup> After a review of the alarm and diagnostics, if there is a situation that requires FAA notification, a NOC technician opens a Notice to Airmen (“NOTAM”)<sup>19</sup> unless the problem can be diagnosed and remedied within thirty minutes of the initial alarm.<sup>20</sup> RMS also notifies the tower owner or its designated representative of the failure, tracks the expected response time, and provides continued reports if repairs are not made in a timely manner. Any NOTAM resulting

<sup>12</sup> *Insite and TowerCo Waiver Request* at 2.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.* at 6.

<sup>15</sup> *Id.* at 7.

<sup>16</sup> *Id.* at 6.

<sup>17</sup> See Letter from Jean L. Kiddoo, Bingham McCutchen LLP, to Jeffrey S. Steinberg, Deputy Chief, Spectrum and Competition Policy Division, Wireless Telecommunications Bureau (August 23, 2010) (*Insite and TowerCo Supplement*). This additional information was provided in response to a request by the Wireless Telecommunications Bureau’s Spectrum and Competition Policy Division. See Letter from Jeffrey S. Steinberg, Deputy Chief, Spectrum and Competition Policy Division, Wireless Telecommunications Bureau, to Jean L. Kiddoo, Bingham McCutchen LLP (July 6, 2010).

<sup>18</sup> *Insite and TowerCo Waiver Request* at 7.

<sup>19</sup> Antenna structure owners “shall report immediately by telephone or telegraph to the nearest Flight Service Station or office of the Federal Aviation Administration any observed or otherwise known extinguishment or improper functioning of any top steady burning light or any flashing obstruction light, regardless of its position on the antenna structure, not corrected within 30 minutes.” 47 C.F.R. § 17.48(a). See FAA Circular AC-70/7460-1K, Chapter 2, Light Failure Notification.

<sup>20</sup> *Id.* at 8.

from a failure is tracked, extended, or cancelled as needed depending on the repair process.<sup>21</sup> All alarms, operator responses, and notes are captured and archived by the RMS System and maintained for at least one year.<sup>22</sup>

(2) *24-hour polling.* The RMS System performs a daily communications test whereby the RMS System initiates an outbound status call from each tower's controller within continuous and consecutive twenty-four hour periods. If the NOC is not able to establish contact with a particular controller, after eight attempts a NOTAM is opened and an on-site visit by a technician is scheduled. The NOTAM is closed only upon confirmation that the repair is complete and the tower's lighting system has been restored or communication has been re-established between the controller and the NOC.<sup>23</sup>

(3) *Manual contact.* The RMS System allows NOC technicians to examine each tower's system remotely and check the current status of all monitored inputs, verify the signal strength of the transmitter, control day and night modes, and force a NOTAM in the event of failure of the lighting systems.<sup>24</sup>

7. The RMS System employs two Network Operations Centers ("NOCs") that are staffed with trained personnel capable of responding to alarms 24 hours per day, 365 days per year.<sup>25</sup> All signals from the tower units are reported independently to both NOCs so that a loss of either NOC will not interrupt the monitoring of any tower unit. Any catastrophic loss of one of the NOCs would result in all operations shifting to the other NOC, where operations could be sustained indefinitely.<sup>26</sup> Each NOC has the ability to communicate during sustained power outages and can failover to gasoline-powered generators if necessary, running indefinitely without commercial electric power.<sup>27</sup> Significantly, in the unlikely event that both NOCs were to become incapacitated and suffer complete failures, the NOTAM tracking program is web-based on a server that is maintained directly by RMS, thereby allowing access to information on all tower units and NOTAMs by any authorized RMS personnel, operator, or tower owner from anywhere in the world where Internet access is available.<sup>28</sup> Further, within the NOC, all servers are actively monitored by supervisory programs that alert the operators of any malfunction of the software or server hardware,<sup>29</sup> and all incoming telephone lines carrying incoming signals are monitored for loss of communications and marginal operation.<sup>30</sup> In addition, the RMS System is capable of providing redundant wireless and landline communication channels between any site and each NOC.<sup>31</sup>

8. The technology that the RMS System employs is similar to that exhibited by the monitoring systems employed by ATC, GSI, Optasite, Crown Castle, Global Tower, Diamond, and Mobilitie, which were each granted waivers based on the efficacy of that technology. These systems are

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<sup>21</sup> *Id.*

<sup>22</sup> *Id.* at 9-10.

<sup>23</sup> *Id.* at 9.

<sup>24</sup> *Id.* at 8-9; *Insite and TowerCo Supplement* at 1.

<sup>25</sup> *Insite and TowerCo Supplement* at 1.

<sup>26</sup> *Insite and TowerCo Waiver Request* at 7.

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

<sup>29</sup> *Insite and TowerCo Supplement* at 1.

<sup>30</sup> *Id.*

<sup>31</sup> *Insite and TowerCo Waiver Request* at 7.

similar in that they all have a continuous and permanent two-way link between the tower site and the response center;<sup>32</sup> timely reporting of potential problems;<sup>33</sup> continuously staffed response centers;<sup>34</sup> 24-hour polling of both lighting and communications systems;<sup>35</sup> on demand interrogation capabilities;<sup>36</sup> backup response centers;<sup>37</sup> and essentially uninterrupted communications between the response center and the towers during power outages.<sup>38</sup>

9. Insite and TowerCo both state that, particularly for towers in remote locations, quarterly inspection imposes a substantial and unnecessary resource burden. Insite states that it will spend approximately \$129,200 in 2010 conducting 272 quarterly inspections.<sup>39</sup> TowerCo estimates that it will spend approximately \$184,000 in 2010 conducting 1752 quarterly inspections.<sup>40</sup>

10. For the reasons cited by the Commission in the *ATC/GSI Waiver Order* and by the Bureau in subsequent orders, we conclude, based upon the evidence submitted in the record by Insite and TowerCo, that the *Insite and TowerCo Waiver Request* establishes that quarterly inspections are unnecessary for those towers monitored by the RMS System.<sup>41</sup> The Airspace and Rules Group of the Federal Aviation Administration has stated that it is not opposed to waivers of Section 17.47(b) “provided the applicant can demonstrate a safe and reliable automatic monitoring system with tracking mechanisms to evaluate the remote monitoring technology.”<sup>42</sup> We conclude that the RMS System is a safe and reliable monitoring system with tracking mechanisms to evaluate the remote monitoring technology, and that features of this system provide sufficiently robust monitoring of the control devices, indicators and alarm systems so as to render quarterly inspections unnecessary. Indeed, such advanced technology provides the benefits of more rapid response where there has been a lighting failure, and thus the public interest is served with respect to aircraft safety. In addition, granting waivers to tower owners using the RMS System will save them hundreds of thousands of dollars annually that are unnecessarily spent on quarterly inspections where they have deployed this advanced technology.

11. We therefore grant both Insite’s and TowerCo’s waiver requests. We further determine, on our own motion, that for other tower owners using the RMS System, we will grant, in an expedited manner, waivers upon submission and review of a streamlined petition containing certain certifications. Specifically, any waiver applicant shall submit a certification that: (1) its towers are monitored by the RMS System under the process described in this order; and (2) it maintains a facility to receive notifications of failures from the RMS System, which will enable the tower owner to carry out its

<sup>32</sup> *Insite and TowerCo Waiver Request* at 6, 9.

<sup>33</sup> *Id.* at 2, 8.

<sup>34</sup> *Insite and TowerCo Supplement* at 1.

<sup>35</sup> *Id.*; *Insite and TowerCo Waiver Request* at 9.

<sup>36</sup> *Insite and TowerCo Waiver Request* at 8-9; *Insite and TowerCo Supplement* at 1.

<sup>37</sup> *Insite and TowerCo Waiver Request* at 7.

<sup>38</sup> *Id.* at 7, 10.

<sup>39</sup> *Id.* at 4.

<sup>40</sup> *Id.* at 4-5.

<sup>41</sup> *ATC/GSI Waiver Order*, 22 FCC Rcd at 9747, 9748, ¶¶ 11, 17; *Optasite Waiver Order*, 22 FCC Rcd at 18456, ¶ 8; *Crown Castle Waiver Order*, 22 FCC Rcd at 21884, ¶ 9; *Global Tower Waiver Order*, 23 FCC Rcd at 16531, ¶ 9; *TowerSentry/Diamond Waiver Order*, 24 FCC Rcd 10274, at ¶ 10; *Mobilitie/Flash Waiver Order*, 24 FCC Rcd 11949, at ¶ 8.

<sup>42</sup> Brief Comment of Office of Airspace and Rules, FAA, WT Docket No. 05-326, filed December 4, 2006.

responsibilities under Part 17 of the Commission's rules.<sup>43</sup> We find the latter certification necessary to ensure that tower owners receiving waivers remain equipped to comply with the Commission's regulations. The certification shall be signed, under penalty of perjury, by a company officer (or partner, sole proprietor or similar person able to act on behalf of the tower owner) with knowledge of the underlying facts. To ensure timely processing, waiver requests should be e-mailed to [part17@fcc.gov](mailto:part17@fcc.gov).

#### IV. CONCLUSION

12. For the reasons discussed above, we waive Section 17.47(b) to allow both Insite and TowerCo to conduct the required inspections of their antenna structures monitored by the RMS System on an annual rather than a quarterly basis. We further establish an expedited process for other users of the RMS System to obtain similar waivers. The RMS System reliably diagnoses problems, including any failures of control devices, indicators and alarm systems, within real time, and therefore renders strict application of the rule unnecessary to serve its underlying purpose. Moreover, our action will relieve Insite, TowerCo, and potentially other users of the RMS System of the burden of performing unnecessary quarterly inspections. In addition, granting Insite's and TowerCo's waivers, as well as implementing an expedited waiver process for other tower owners that employ the RMS System, will further encourage tower owners to invest in state-of-the-art technologies so that they too will become capable of continuous monitoring of both their lighting systems and control devices.

13. We note that the Commission has released a Notice of Proposed Rulemaking seeking comment on proposed changes to part 17 of the Commission's rules, including Section 17.47(b), and the waivers that we grant today, as well as any future waivers granted under the expedited process, are subject to any rule changes that the Commission may promulgate in that proceeding.<sup>44</sup>

#### V. ORDERING CLAUSES

14. IT IS THEREFORE ORDERED, pursuant to Sections 4(i), 303(q), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(q), 303(r), and pursuant to Sections 0.131, 0.331, and 1.925 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331, 1.925, that the Request for Waiver filed by Insite IS GRANTED.

15. IT IS FURTHER ORDERED, pursuant to Sections 4(i), 303(q), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(q), 303(r), and pursuant to Sections 0.131, 0.331, and 1.925 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331, 1.925, that the Request for Waiver filed by TowerCo IS GRANTED.

#### FEDERAL COMMUNICATIONS COMMISSION

Jane E. Jackson  
Associate Chief, Wireless Telecommunications Bureau

<sup>43</sup> See *TowerSentry/Diamond Waiver Order* at 6; *Mobilitie/Flash Waiver Order* at 4.

<sup>44</sup> In the Matter of Amendments to Modernize and Clarify Part 17 of the Commission's Rules Concerning Construction, Marking and Lighting of Antenna Structures, RM 11349, *Notice of Proposed Rulemaking*, 25 FCC Rcd 3982, 75 FR 28517 (2010).